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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/829,508	04/09/2001	Jack G. Winterowd	WEYE117204	6724

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EXAMINER

SHOSHO, CALLIE E

ART UNIT	PAPER NUMBER
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1714

11

DATE MAILED: 08/13/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

AS-11

Office Action Summary

Application No.

09/829,508

Applicant(s)

WINTEROWD, JACK G.

Examiner

Callie E. Shosho

Art Unit

1714

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 13 May 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-6,9-13,15-22 and 24-30 is/are pending in the application.
- 4a) Of the above claim(s) 29 and 30 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-6,9-13,15-22, and 24-28 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ 6) ☐ Other:

DETAILED ACTION

1. All outstanding rejections except for those described below are overcome by applicant's amendment filed 5/16/03. The new grounds of rejection as set forth below are necessitated by applicants' amendment and thus, the following action is final.

Non-Statutory Double Patenting

2. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

3. Claims 1-5, 9-13 and 15-22 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 2-3, 9-13, and 15-22 of copending Application No. 09/943,885 in view of Nonweiler et al. (U.S. 5,700,522).

Although the conflicting claims are not identical, they are not patentably distinct for the reasons as set forth in paragraph 8 of the office action mailed 6/27/02, Paper No. 5.

Claim Rejections - 35 USC § 103

4. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

5. Claims 1-6, 9-13, and 15-22 are rejected under 35 U.S.C. 102(b) as being anticipated by Kang et al. (U.S. 3,894,976) in view of Seiner (U.S. 3,951,899) and Gruenwald (U.S. 2,374,678)

Kang et al. discloses water-based paint comprising binder that is polyacrylate emulsion, titanium dioxide, anionic/nonionic surfactant, hydroxyethylcellulose, antifoaming agent, biocide, fumed silica and oil such as linseed oil that comprises 5-65% of the binder. It is disclosed that one type of acrylic emulsion suitable for use in the paint is known under the tradename Rhoplex AC-61 which is well known, as found in Seiner (col.9, lines 28-29), as a emulsion of methylmethacrylate/butyl acrylate copolymer (col.6, line 60, col.6, line 65-col.7, line 7, col.7, lines 17, 34, 45-50, and 56-58, col.13, line 12, examples V and VII, and col.18, lines 46-58).

From example V, it is calculated that the composition comprises, for instance, approximately 21% binder, 24% titanium dioxide, and 0.97% surfactant while from example VII,

it is calculated that the composition comprises, for instance, approximately 15% binder, 26% titanium dioxide, and 4.9% silica.

Although there is no explicit disclosure that the composition exhibits no sediment formation or phase separation when stored at 2 months at 20 °C or any disclosure of the spreadable rate of the paint, given that Kang et al. disclose paint identical to that presently claimed, it is clear that the paint of Kang et al. would inherently exhibit no sedimentation formation or phase separation and would intrinsically possess spreading rate as presently claimed.

The difference between Kang et al. and the present claimed invention is the requirement in the claims of specific type of surfactant.

Kang et al. disclose the use of surfactant, however, there is no disclosure of specific type of surfactant as presently claimed.

Gruenwald disclose surfactant that is derived from morpholine and long-chain, i.e. C₁₂-C₃₆, carboxylic acid (page 1, col.1, lines 35-45) wherein the motivation for using such surfactant is that it is inexpensive, imparts enhanced surface-active properties, and produces better pigment dispersions (page 1, col.1, lines 15-21 and page 2, col.2, lines 9-15).

In light of the above, it therefore would have been obvious to one of ordinary skill in the art to use such surfactant in the paint of Kang et al. in order to produce a paint with superior surfactant properties and effective pigment dispersion, and thereby arrive at the claimed invention.

6. Claims 1-5, 9, and 15-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Coleman et al. (U.S. 3,959,224) in view of Gruenwald (U.S. 2,374,678).

Coleman disclose water-based paint comprising latex, i.e. binder, obtained from alkyl (meth)acrylates, titanium dioxide, 0.1-1% surfactant, thickening agent such as hydroxyethylcellulose, dispersant, plasticizer, preservative, vegetable oil such as soybean oil, and defoamer (col.18, lines 53-55, col.19, lines 9-10 and 26, col.19, line 67-col.20, line 5, col.20, lines 9-10, 14-15, and 20-21, 25-26, and 31, and Table I). From Table I, it is calculated from Paint A, that the paint contains approximately 7.6% hydroxyethylcellulose and 20% titanium oxide.

Although there is no explicit disclosure that the composition exhibits no sediment formation or phase separation when stored at 2 months at 20 °C or any disclosure of the spreadable rate of the paint, given that Coleman disclose paint identical to that presently claimed, it is clear that the paint of Coleman would intrinsically exhibit no sedimentation formation or phase separation and would intrinsically possess spreading rate as presently claimed.

The difference between Coleman and the present claimed invention is the requirement in the claims of (a) amount of vegetable oil and (b) specific type of surfactant.

With respect to argument (a), Coleman discloses the use of 9% vegetable oil, while the present claims require the use of 10% vegetable oil.

It is apparent, however, that the instantly claimed amount of vegetable oil and that taught by Coleman are so close to each other that the fact pattern is similar to the one in *In re Woodruff*, 919 F.2d 1575, USPQ2d 1934 (Fed. Cir. 1990) or *Titanium Metals Corp. of America v. Banner*, 778 F.2d 775, 227 USPQ 773 (Fed.Cir. 1985) where despite a "slight" difference in the ranges

the court held that such a difference did not “render the claims patentable” or, alternatively, that “a prima facie case of obviousness exists where the claimed ranges and prior art ranges do not overlap but are close enough so that one skilled in the art would have expected them to have the same properties”.

In light of the case law cited above and given that there is only a “slight” difference between the amount of vegetable oil disclosed by Coleman and the amount disclosed in the present claims and further given the fact that no criticality is disclosed in the present invention with respect to the amount of vegetable oil, it therefore would have been obvious to one of ordinary skill in the art that the amount of vegetable oil disclosed in the present claims is but an obvious variant of the amounts disclosed in Coleman, and thereby one of ordinary skill in the art would have arrived at the claimed invention.

With respect to argument (b), Coleman each discloses use of surfactant, however, there is no disclosure of specific type of surfactant as presently claimed.

Gruenwald disclose surfactant that is derived from morpholine and long-chain, i.e. C₁₂-C₃₆, carboxylic acid (page 1, col.1, lines 35-45) wherein the motivation for using such surfactant is that it is inexpensive, imparts enhanced surface-active properties, and produces better pigment dispersions (page 1, col.1, lines 15-21 and page 2, col.2, lines 9-15).

In light of the above, it therefore would have been obvious to one of ordinary skill in the art to use such surfactant in the paint of Coleman in order to produce a paint with superior surfactant properties and effective pigment dispersion, and thereby arrive at the claimed invention.

7. Claims 10-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Coleman in view of Gruenwald as applied to claims 1-5, 9, and 15-21 above, and further in view of Schall et al. (U.S. 6,013,721).

The difference between Coleman in view of Gruenwald and the present claimed invention is the requirement in the claims of specific type of binder.

Schall et al., which is drawn to water-based paint, disclose the use of binder with glass transition temperature of 10-40 °C such as butyl acrylate/methyl methacrylate copolymer (col.4, lines 8-11 and 56-59). Although there is no explicit disclosure of the pH of the binder, given that the binder is identical to that presently claimed, it is clear that it would inherently possess the same pH. The motivation for using such binder is to control the adhesion of paint to substrate.

In light of the above, it therefore would have been obvious to one of ordinary skill in the art to use specific binder disclosed by Schall et al. in paint of Coleman in order to produce paint that effectively adheres to substrate, and thereby arrive at the claimed invention.

8. Claims 24 and 26-28 are rejected under 35 U.S.C. 103(a) as being unpatentable Kang et al. (U.S. 3,894,976) in view of Krevanas et al. (U.S. 4,045,393) and Gruenwald (U.S. 2,374,678).

Kang et al. discloses water-based paint comprising binder which is polyacrylate emulsion, titanium dioxide, anionic/nonionic surfactant, hydroxyethylcellulose, antifoaming agent, biocide, fumed silica and oil such as linseed oil which comprises 5-65% binder (col.6, line 60, col.6, line 65-col.7, line 7, col.7, lines 17, 34, 45-50, and 56-58, col.13, line 12, examples V and VII, and col.18, lines 46-58) Although there is no explicit disclosure that the composition exhibits no sediment formation or phase separation when stored at 2 months at 20 °C or any

disclosure of the spreadable rate of the paint, given that Kang et al. disclose paint identical to that presently claimed, it is clear that the paint of Kang et al. would inherently exhibit no sedimentation formation or phase separation and would intrinsically possess spreading rate as presently claimed.

The difference between Kang et al. and the present claimed invention is the requirement in the claims of (a) specific type of vegetable oil and (b) specific type of surfactant.

With respect to difference (a), Krevanas et al., which is drawn to paint composition, disclose the use of soy bean oil in order to prevent paint from rusting metal substrate on which it is coated (col.2, lines 24-28 and col.4, lines 3-8). Krevanas et al. also disclose the equivalence and interchangeability of linseed oil as disclosed by Kang et al. with soybean oil as presently claimed.

With respect to difference (b), Kang et al. each disclose use of surfactant, however, there is no disclosure of specific type of surfactant as presently claimed.

Gruenwald disclose surfactant that is derived from morpholine and long-chain, i.e. C₁₂-C₃₆, carboxylic acid (page 1, col.1, lines 35-45) wherein the motivation for using such surfactant is that it is inexpensive, imparts enhanced surface-active properties, and produces better pigment dispersions (page 1, col.1, lines 15-21 and page 2, col.2, lines 9-15).

In light of the above, it therefore would have been obvious to one of ordinary skill in the art to use such soy bean oil and surfactant which is derived from morpholine and long-chain, i.e. C₁₂-C₃₆, carboxylic acid in the paint of Kang et al. in order to produce a paint which will not rust metal substrates and possesses superior surfactant properties and effective pigment dispersion, and thereby arrive at the claimed invention.

9. Claim 25 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kang et al. in view of Krevanas et al. and Gruenwald et al. as applied to claims 24 and 26-28 above, and further in view of Nonweiler et al. (U.S. 5,700,522).

The difference between Kang et al. in view of Krevanas et al. and Gruenwald and the present claimed invention is the requirement in the claims of coalescing agent.

Nonweiler et al., which is drawn to paint composition, disclose the use of coalescing agent to promote more continuous coating (col.5, line 59-col.6, line 5).

In light of the motivation for using coalescing agent disclosed by Nonweiler et al. as described above, it therefore would have been obvious to one of ordinary skill in the art to use such coalescing agent in the paint of Kang et al. in order to produce a paint which form a continuous film, and thereby arrive at the claimed invention.

10. Claims 24 and 26-28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Coleman (U.S. 3,959,224) in view of Gruenwald (U.S. 2,374,678).

Coleman disclose water-based paint comprising latex, i.e. binder, obtained from alkyl (meth)acrylates, titanium dioxide, surfactant, thickening agent such as hydroxyethylcellulose, dispersant, plasticizer, preservative, vegetable such as soybean oil, and defoamer (col.18, lines 53-55, col.19, lines 9-10 and 26, col.19, line 67-col.20, line 5, col.20, lines 9-10, 14-15, and 20-21, 25-26, and 31, and Table I). Although there is no explicit disclosure that the composition exhibits no sediment formation or phase separation when stored at 2 months at 20 °C or any disclosure of the spreadable rate of the paint, given that Coleman disclose paint identical to that presently claimed, it is clear that the paint of Coleman would intrinsically exhibit no

sedimentation formation or phase separation and would intrinsically possess spreading rate as presently claimed.

The difference between Coleman and the present claimed invention is the requirement in the claims of (a) amount of soybean oil and (b) specific type of surfactant.

With respect to difference (a), Coleman discloses the use of 9% soybean oil, while the present claims require the use of 10% vegetable oil.

It is apparent, however, that the instantly claimed amount of soybean oil and that taught by Coleman are so close to each other that the fact pattern is similar to the one in *In re Woodruff*, 919 F.2d 1575, USPQ2d 1934 (Fed. Cir. 1990) or *Titanium Metals Corp. of America v. Banner*, 778 F.2d 775, 227 USPQ 773 (Fed. Cir. 1985) where despite a "slight" difference in the ranges the court held that such a difference did not "render the claims patentable" or, alternatively, that "a prima facie case of obviousness exists where the claimed ranges and prior art ranges do not overlap but are close enough so that one skilled in the art would have expected them to have the same properties".

In light of the case law cited above and given that there is only a "slight" difference between the amount of soybean oil disclosed by Coleman and the amount disclosed in the present claims and further given the fact that no criticality is disclosed in the present invention with respect to the amount of soybean oil, it therefore would have been obvious to one of ordinary skill in the art that the amount of soybean oil disclosed in the present claims is but an obvious variant of the amounts disclosed in Coleman, and thereby one of ordinary skill in the art would have arrived at the claimed invention.

With respect to difference (b), Coleman discloses use of surfactant, however, there is no disclosure of specific type of surfactant as presently claimed.

Gruenwald disclose surfactant that is derived from morpholine and long-chain, i.e. C₁₂-C₃₆, carboxylic acid (page 1, col.1, lines 35-45) wherein the motivation for using such surfactant is that it is inexpensive, imparts enhanced surface-active properties, and produces better pigment dispersions (page 1, col.1, lines 15-21 and page 2, col.2, lines 9-15).

In light of the above, it therefore would have been obvious to one of ordinary skill in the art to use such surfactant in the paint of Coleman in order to produce a paint with superior surfactant properties and effective pigment dispersion, and thereby arrive at the claimed invention.

11. Claim 25 is rejected under 35 U.S.C. 103(a) as being unpatentable over Coleman in view of Gruenwald as applied to claims 24 and 26-28 above, and further in view of Nonweiler et al. (U.S. 5,700,522).

The difference between Coleman in view of Gruenwald and the present claimed invention is the requirement in the claims of coalescing agent.

Nonweiler et al., which is drawn to paint composition, disclose the use of coalescing agent to promote more continuous coating (col.5, line 59-col.6, line 5).

In light of the motivation for using coalescing agent disclosed by Nonweiler et al. as described above, it therefore would have been obvious to one of ordinary skill in the art to use such coalescing agent in the paint of Coleman in order to produce a paint which form a continuous film, and thereby arrive at the claimed invention.

Response to Arguments

12. Applicant's arguments with respect to Bier (U.S. 4,792,357) have been considered but they are moot in view of the discontinuation of this reference against the present claims.

13. Applicant's arguments filed 5/16/03 have been fully considered but, with the exception of arguments relating to Bier, they are not persuasive.

Specifically, applicant argues, and examiner agrees, that there is no disclosure in either Kang et al. or Coleman of anionic surfactant comprising salt derived from morpholine and long-chain carboxylic acid.

While Kang et al. (col.7, line 13) and Coleman (col.19, line 68-col.20, line 5) each disclose the use of anionic surfactant, there is no disclosure of the use of surfactant comprising salt derived from morpholine and long-chain carboxylic acid as now required in all the present claims. This is why Kang et al. and Coleman are each used in combination with Gruenwald.

Applicant argues that Gruenwald teaches a vast number of possible surfactants with only a passing reference to complex salts. Further, applicant further argues that there is no disclosure or suggestion in Gruenwald that would lead one of ordinary skill in the art to employ the three salt derivatives specifically recited in present claim 9.

However, it is noted that page 1, col.1, lines 35-47 of Gruenwald discloses surfactant formed with morpholine and aliphatic compounds containing C₁₂-C₃₆ carbon atoms including waxes, fats, oils, fatty acid (i.e. long-chain carboxylic acid), and fatty alcohol and derivatives thereof. Thus, Gruenwald does not disclose a vast number of surfactants but rather surfactant formed from morpholine and five different types of aliphatic compounds, i.e. waxes, fats, oils,

fatty acid, and fatty alcohol and thus the choice of surfactant formed from morpholine and fatty acid as presently claimed is one from amongst five different types of morpholine and aliphatic compound combinations. Further, Gruenwald does provide guidance to select out surfactant formed from morpholine and fatty acid. Page 1, col.2, lines 34-36 of Gruenwald states that a "desirable" product is obtained by forming the morpholine with fatty acid.

Applicant also argues that Gruenwald only makes passing reference to complex salts. However, page 1, col.1, lines 48-50 discloses that morpholine forms complex salts with fatty acid and page 1, col.1, lines 13-14 and 19-20 discloses that the object of the invention is to make surface active complexes which will give enhanced surface-active properties. Further, if the surfactant is formed with combination of morpholine and fatty acid, it is clear that a salt will intrinsically be formed from such combination.

With respect to present claim 9, it is noted that Gruenwald discloses fatty acid containing C₁₂-C₃₆ carbon atoms. Such disclosure clearly encompasses stearic acid, palmitic acid, and myristic acid as presently claimed. Thus, absent evidence to the contrary, it would have been obvious to one of ordinary skill in the art to choose fatty acid from Gruenwald, including those presently claimed, and arrive at the claimed invention.

In light of the above, it is the examiner's position that Gruenwald remains a relevant reference against the present claims.

14. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

Art Unit: 1714


A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

15. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Callie E. Shosho whose telephone number is 703-305-0208. The examiner can normally be reached on Monday-Friday (6:30-4:00) Alternate Fridays Off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vasu Jagannathan can be reached on 703-306-2777. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9310 for regular communications and 703-872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.

CS
August 9, 2003


Callie E. Shosho
Primary Examiner
Art Unit 1714